

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- 5 (i) APPLICANT: Fang Fang
- (ii) TITLE OF INVENTION: IDENTIFYING PEPTIDE LIGANDS OF TARGET
PROTEINS WITH TARGET COMPLEMENTARY LIBRARY TECHNOLOGY (TCLT)
- 10 (iii) NUMBER OF SEQUENCES: 18
- (iv) CORRESPONDENCE ADDRESS:
 (A) ADDRESSEE: Lucy X. Yang
 (B) STREET: 3718 Winding Way
 15 (C) CITY: Kalamazoo
 (D) STATE: MI
 (E) COUNTRY: USA
 (F) ZIP: 49004
- 20 (v) COMPUTER READABLE FORM:
IBM, Microsoft Word 6.0
- (vi) CURRENT APPLICATION DATA:
 (A) APPLICATION NUMBER:
 25 (B) FILING DATE:
 (C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:
 (A) NAME: Lucy X. Yang
 30 (B) REGISTRATION NUMBER: 40,259
- (ix) TELECOMMUNICATION INFORMATION:
 (A) TELEPHONE: 616-385-5824
 35 (B) TELEFAX: 616-385-5824
- (2) INFORMATION FOR SEQ ID NO:1:
- (i) SEQUENCE CHARACTERISTICS:
 40 (A) LENGTH: 45 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
 (E) FEATURE: X residue designated in (XXX)n can be A, C, T, U,
 45 or G; n can be any integer.
- (ii) MOLECULE TYPE: DNA
- (iii) HYPOTHETICAL: NO
- 50 (iv) ANTI-SENSE: NO
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

55 ctgtcagggc ccgaggggct (XXX)nggggccg ctgcggcctg tcagg 45

(2) INFORMATION FOR SEQ ID NO:2:

- 60 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 5 amino acids
 (B) TYPE: amino acids
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
- 65 (ii) MOLECULE TYPE: peptide
- (iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

5

Glu Thr Ser Val Ser
1 5

10 (2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 6 amino acids
(B) TYPE: amino acids
15 (C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

20 (iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

25

Ser Cys Asp Glu Pro Lys
1 5

30 (2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 10 amino acids
(B) TYPE: amino acids
35 (C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

40 (iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

45

Lys Gln Leu Leu Leu Pro Gly Asn Asn Arg
1 5 10

50 (2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 8 amino acids
(B) TYPE: amino acids
55 (C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

60 (iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

65

Pro Asp Gly Glu Ser Thr Ala Lys
1 5

5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 13 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
 10 (E) FEATURES: Xaa at position 3 can be Arg or Glu; Xaa at
 position 6 can be Pro, His or Thr; Xaa at position 7 can be Gly or Ala;
 Xaa at position 8 can be Lys or Glu; Xaa at position 9 can be Gly, Gln,
 Arg or Ala; Xaa at position 11 can be Gln or Gly; Xaa at position 13 can
 be Met or Ile.

(iii) HYPOTHETICAL: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

(2) INFORMATION FOR SEQ ID NO:7:

35 (ii) MOLECULE TYPE: peptide

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

(2) INFORMATION FOR SEO ID NO:8:

55 (E) FEATURES: Xaa at position 2 can be Val or Ile; Xaa at position 3 can be Arg or His; Xaa at position 6 can be Pro or Glu; Xaa at position 10 can be Leu or Pro; Xaa at position 11 can be Gln or Val; Xaa at position 12 can be Trp, Tyr or Leu; Xaa at position 14 can be Ser, Ala or Gly.

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Trp Xaa Xaa Glu Ala Xaa Gly Lys Gly Xaa Xaa Xaa Val Xaa

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 2. **DATE** _____
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 205. **REASON** _____
 206. **WITNESSES** _____
 207. **SIGNATURE** _____
 208. **INITIALS** _____
 209. **REMARKS** _____
 210. **DATE** _____
 211. **TIME** _____
 212. **LOCATION** _____
 213. **REASON** _____
 214. **WITNESSES** _____
 215. **SIGNATURE** _____
 216. **INITIALS** _____
 217. **REMARKS** _____
 218. **DATE** _____
 219. **TIME** _____
 220. **LOCATION** _____

1 5 10

(2) INFORMATION FOR SEQ ID NO:9:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 10 (D) TOPOLOGY: linear
 (E) FEATURES: Xaa at position 2 can be Ile or Val.

(ii) MOLECULE TYPE: peptide

15 (iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

20 Trp Xaa Arg Glu Pro Pro Gly Lys Gly Leu Gln Trp Ile Gly
 1 5 10

25 (2) INFORMATION FOR SEQ ID NO:10:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 30 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
 (E) FEATURES: Xaa at position 9 can be Gly or Gln.

(ii) MOLECULE TYPE: peptide

35 (iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Trp Val Arg Glu Met Pro Gly Lys Xaa Leu Gln Trp Met Gly
 1 5 10

45 (2) INFORMATION FOR SEQ ID NO:11:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 50 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

55 (iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

60 Trp Ile Arg Glu Ser Pro Ser Arg Gly Leu Gln Trp Leu Gly
 1 5 10

65 (2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 15 amino acids

(B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear
 (E) FEATURES: Xaa at position 8 can be Glu or Lys; Xaa at 9
 5 position can be Pro, Ser or Ala

(ii) MOLECULE TYPE: peptide

(iii) HYPOTHETICAL: NO

10

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

15 Trp Tyr Glu Glu Lys Pro Gly Xaa Xaa Pro Lys Leu Ley Ile Tyr
 1 5 10 15

(2) INFORMATION FOR SEQ ID NO:13:

20

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

25

(D) TOPOLOGY: linear

(E) FEATURES: Xaa at position 10 can be Glu or Asp

(ii) MOLECULE TYPE: peptide

30

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

35

Pro Asp Ala Leu His Gly Pro Phe Ala Xaa Leu Pro His Pro
 1 5 10

40 (2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids

(B) TYPE: amino acid

45

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(E) FEATURES: Xaa at position 5 can be Gly or Arg; Xaaa at
 position 10 can be Glu or Asp

50 (ii) MOLECULE TYPE: peptide

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Pro Asp Ala Leu Xaa Gly Pro Phe Ala Xaa Leu Pro Asn Pro
 1 5 10

60

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

65

(A) LENGTH: 15 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(2) INFORMATION FOR SEQ ID NO:18:

55 (i) SEQUENCE CHARACTERISTICS:

 (A) LENGTH: 16 base pairs

 (B) TYPE: nucleic acid

 (C) STRANDEDNESS: single

 (D) TOPOLOGY: linear

60 (ii) MOLECULE TYPE: DNA

 (iii) HYPOTHETICAL: NO

 (iv) ANTI-SENSE: NO

65 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

ggccgacgtg gcctgt

16

- 5 (2) INFORMATION FOR SEQ ID NO:19:
- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- 10 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (iii) HYPOTHETICAL: NO
- 15 (iv) ANTI-SENSE: NO
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:
- 20 ccctcatagt taagcgtaac g 21

25

30

T03020-4T04S60